

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 178 AND HOUSLEY RD./BESTGATE RD. IN ANNE ARUNDIL COUNTY. MD 178 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

THE EXISTING EIGHT-PHASE, FULL-TRAFFIC-ACTUATED NEMA CONTROLLER HOUSED IN A BASE MOUNTED CABINET IS BEING RELOCATED. THE CONTROLLER CURRENTLY OPERATES AS A SIX-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND MD 178 AND SPLIT PHASING FOR SIDE STREETS. THE CONTROLLER WILL BE CHANGED TO AN EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND MD 178 AND EXCLUSIVE LEFT TURN PHASES FOR THE SIDE STREETS.

MS. KIM TRAN	MR. CHARLES GEORGE
ASSISTANT DISTRICT ENGINEER - TRAFFIC	ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1003	(410) 841-1002

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
(410) 787-7652

MS. DARLENE EIDE  
SUPPLY OFFICE  
SIGNAL SHOP WAREHOUSE  
(410) 787-7668

NOTE:

1. PULL BACK EXISTING "X,Y,Z" CABLE FROM EXISTING CONTROLLER TO THIS HANDHOLE. AFTER EXISTING CONTROLLER HAS BEEN RELOCATED, REINSTALL "X,Y,Z," CABLE THROUGH PROPOSED CONDUIT TO RELOCATED CONTROLLER.

**PHASING CHART**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	R	R-	R	R-	R	R-	R	R-	R	R	R-	R	R-	R	R
2	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-
3	R	R-	R	R-	R	R-	R	R-	R	R	R-	R	R-	R	R
4	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-
5	R	R-	R	R-	R	R-	R	R-	R	R	R-	R	R-	R	R
6	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-
7	R	R-	R	R-	R	R-	R	R-	R	R	R-	R	R-	R	R
8	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-
9	R	R-	R	R-	R	R-	R	R-	R	R	R-	R	R-	R	R
10	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-
11	R	R-	R	R-	R	R-	R	R-	R	R	R-	R	R-	R	R
12	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-
13	R	R-	R	R-	R	R-	R	R-	R	R	R-	R	R-	R	R
14	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-	R	R-
15	R	R-	R	R-	R	R-	R	R-	R	R	R-	R	R-	R	R

A. APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND  
INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE  
CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

NONE

A-C	VIDEO DETECTION 500 FT. PREMANUFACTURED CABLE
D	VIDEO DETECTION 250 FT. PREMANUFACTURED CABLE
E-G	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
H-I	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
J-K	EXISTING 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
L-N	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
O-W	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
X	EXISTING TELEMETRY INTERFACE CABLE
Y	EXISTING FIBER OPTIC MODEM CABLE
Z	EXISTING FIBER OPTIC TELEMETRY CABLE
a	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
b	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
ELW	EXISTING LOOP WIRE (NO. 14 A.W.G.)
ⓧ	GROUND ROD
PTS	PROPOSED TELEPHONE SERVICE
PES	PROPOSED ELECTRICAL SERVICE

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR  
ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO OOTS FOR  
APPROVAL PRIOR TO INSTALLATION.


<u>ITEM NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	2 EA	TEST PIT EXCAVATION
5001	2 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING ARROW
5002	4 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING LETTER
5005	50 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5006	25 LF	FURNISH AND INSTALL 5 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5008	40 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKING - ANY WIDTH
8001	1 EA	FURNISH AND INSTALL 250 FT. VIDEO CABLE TO CONTROLLER
8003	3 EA	FURNISH AND INSTALL 500 FT. VIDEO CABLE TO CONTROLLER
8006	1 EA	CUT, CLEAN, AND CAP TRAFFIC SIGNAL STRUCTURE
8011	27 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
8024	1 EA	FURNISH AND INSTALL 70 FT. MAST ARM AND POLE
8048	LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8049	2 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
8051	20 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8052	110 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8053	20 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8057	7 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8060	630 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
8063	100 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8064	100 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8080	2 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
8081	990 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR ALUMINUM SHIELDED
8084	70 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR NO. 14 AWG
8085	3010 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR NO. 14 AWG
8086	735 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR NO. 12 AWG
----	6 EA	RELOCATE EXISTING SIGN
----	1 EA	RELOCATE EXISTING CONTROLLER
----	360 LF	PULL BACK AND RE-INSTALL EXISTING WIRING
----	1 EA	INSTALL CONCRETE PAD FOR BASE MOUNTED CABINET AND CONTROLLER

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

NONE

ALL SIGNAL EQUIPMENT TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR

**T**RAFFIC **C**ONCEPTS, INC.  
325 Gambrills Road  
Suite E  
Gambrills, MD 21054  
(410) 923-7101


**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
*Office of Traffic & Safety*  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
 GENERAL INFORMATION  
 MD 178 AND HOUSLEY RD./BESTGATE RD.

DRAWN BY: <u>M.HOWELL</u>	F.A.P. NO. _____	TS NO. _____	SHEET NO.  2 OF 2
CHECKED BY: <u>T.ZAYDEL</u> <i>TZ</i>	S.H.A. NO. _____	<u>3319-D-G1</u>	
SCALE: <u>1" = 20'</u>	COUNTY: <u>ANNE ARUNDEL</u>	T.I.M.S. NO. _____	
DATE: <u>6-1-03</u>	LOT MILE: <u>02017800.35</u>	F856	